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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/656,522	09/07/2000	George Gerpheide	0672.CIRQ.NP	9011

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MORRISS O'BRYANT COMPAGNI, P.C.
136 SOUTH MAIN STREET
SUITE 700
SALT LAKE CITY, UT 84101

EXAMINER	
NGUYEN, JENNIFER T	

ART UNIT	PAPER NUMBER
2674	

DATE MAILED: 07/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/656,522	GERPHEIDE ET AL.	
	Examiner	Art Unit	
	Jennifer T. Nguyen	2674	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 September 2000*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *8-37* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *8-37* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This office action is responsive for amendment filed on 4/22/05.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 8, 9, 12-17, 22, 23, 26-31, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirose (Patent No. US 5,170,348), Holehan (Patent No. US 5,988,902) in view of Gerpheide (Patent No. US 6,473,069) and further in view of Godfrey et al. (Patent No. US 5,433,610).

Regarding claims 8, 22 and 36, referring to Figs. 1-3 and 11, Hirose teaches a touchpad keyboard (i.e., character inputting area 5) for entering data into a handheld and portable electronic appliance (col. 1, lines 1, col. 33-56 and col. 4, line 59 to col. 5, line 17), said touchpad keyboard (5) comprising:

a touchpad (col. 8, lines 33-37);

a communications port for direct coupling to the hand-held portable electronic appliance (15) that enables transmission thereto of signals corresponding to the plurality of keys touched on the touchpad keyboard (5) (Figs. 6 and 11);

and an audible feedback system that causes audible whenever any key of the plurality of keys is touched on the touchpad keyboard (col. 1, lines 51-54).

Hirose differs from claims 8, 22 and 36 in that he does not specifically teach the touchpad having a single sensing surface including circuitry for detecting and localizing a pointing object on the single surface thereof and an overlay disposed on the single sensing surface, visual feedback that corresponds to signals that will be generated therefrom when the plurality of keys of the touchpad keyboard are touched and an audio feedback system that causes a pre-recorded sound. However, referring to Fig. 3, Holehan teaches a touchpad (110) having a single sensing surface (120) including circuitry for detecting and localizing a pointing object on the single surface thereof and an overlay disposed on the single sensing surface (col. 4, lines 1-8, lines 33-36). Gerpheide teaches visual feedback that corresponds to signals that will be generated therefrom when the plurality of keys of the touchpad keyboard are touched (col. 5, lines 35-40 and col. 9, lines 10-12) and Godfrey teaches audible feedback system that causes a pre-recorded sound (Fig. 1, col. 1, line 47 to col. 2, line 43). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the single sensing surface as taught by Holehan, visual feedback as taught by Gerpheide and the audio feedback system that causes a pre-recorded sound as taught by Godfrey in the system of Hirose in order to provide user a more convenient operation for user.

Regarding claims 9 and 23, the combination of Hirose, Holehan, Gerpheide, and Godfrey teaches the pre-recorded sound of the audio feedback system includes a pre-recorded voice that states a name of an associated key of the plurality of keys that has been touched (col. 1, line 47 to col. 2, line 43 of Godfrey).

Regarding claims 12 and 26, Hirose further teaches a communications cable (14) that is coupled to the communications port to thereby enable remote coupling to a portable electronic appliance (Fig. 11).

Regarding claims 13 and 27, Hirose further teaches the hand-held and portable electronic appliance is portable computers (col. 3, lines 34-36).

Regarding claims 14 and 28, Hirose further teaches the communications port is wire (Fig. 11).

Regarding claims 15 and 29, the combination of Hirose, Holehan, Gerpheide, and Godfrey teaches touchpad keyboard in includes an overlay further comprises tactile feedback (col. 5, lines 56-67 of Holehan).

Regarding claims 16 and 30, the combination of Hirose, Holehan, Gerpheide, and Godfrey a plurality of raised ridges, wherein the plurality of raided ridges (70) defile a plurality of zones, wherein the plurality of zones corresponds to the plurality of keys of the touchpad keyboard (col. 7, line 56 to col. 8, line 25 Gerpheide).

Regarding claims 17 and 31, the combination of Hirose, Holehan, Gerpheide, and Godfrey teaches the touchpad (110) is capacitance-sensitive (col. 4, lines 33-36).

4. Claims 10 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirose (Patent No. US 5,170,348), Holehan (Patent No. US 5,988,902), Gerpheide (Patent No. US 6,473,069) in view of Godfrey et al. (Patent No. US 5,433,610) and further in view of Kikinis et al. (Patent No. US 5,835,732).

Regarding claims 10 and 24, the combination of Hirose, Gerpheide, and Godfrey differs from claims 10 and 24 in that it does not specifically teach a mechanical scrolling wheel

disposed in a side of touchpad, such that a user can rotate the mechanical wheel to thereby cause data on a display screen to scroll up or down. However, referring to Fig. 4, Kikinis teaches a mechanical scrolling wheel (18) disposed in a side of touchpad keyboard (74), such that a user can rotate the mechanical wheel to thereby cause data on a display screen to scroll up or down in order to provide a touchpad of requiring minimal amount of force to be activated (col. 7, lines 39-56). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the scroll wheel as taught by Kikinis in the system of the combination of Hirose, Holehan, Gerpheide, and Godfrey in order to allow interacting with the device rapidly and conveniently.

5. Claims 11, 21, 25, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirose (Patent No. US 5,170,348), Holehan (Patent No. US 5,988,902), Gerpheide (Patent No.: US 6,473,069) in view of Godfrey et al. (Patent No.: US 5,433,610) and further in view of Kono (Patent No.: US 5,914,707).

Regarding claims 11 and 25, the combination of Hirose, Holehan, Gerpheide, and Godfrey differs from claims 11 and 25 in that it does not specifically teach an enrolling zone disposed in the housing, such that a user slides a pointing object along the touchpad scrolling zone to thereby cause data on a display screen to, scroll up or down, corresponding to a direction of movement of the pointing object. However, referring to Fig. 1, Kono teaches an enrolling zone (3A, 3B) disposed in the housing (3), such that a user slides a pointing object along the touchpad scrolling zone to thereby cause data on a display screen to scroll up or down, corresponding to a direction of movement of the pointing object (col. 5, line 61 to col. 6, line 18). Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to incorporate the enrolling zone as taught by Kono in the system of the combination of Hirose, Holehan, Gerpheide, and Godfrey in order to provide a touchpad of requiring minimal amount of force to be activated.

Regarding claims 21 and 35, the combination of Hirose, Holehan, Gerpheide, Godfrey, and Kono teaches a second touchpad (3A, 3B) that is dedicated to function of scrolling on a display (col. 5, line 61 to col. 6, line 18)

6. Claims 18, 19, 32, 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirose (Patent No. US 5,170,348), Holehan (Patent No. US 5,988,902), Gerpheide (Patent No.: US 6,473,069) in view of Godfrey et al. (Patent No.: US 5,433,610) and further in view of Grant et al. (U.S. Patent No. 6,618,039).

Regarding claims 18 and 32, the combination of Hirose, Holehan, Gerpheide, and Godfrey differs from claims 18 and 32 in that it does not specifically teach a first dedicated key that facilitates navigation in web pages. However, referring to Fig. 5, Grant teaches a first dedicated key that facilitates navigation in web pages (col. 5, lines 26-61). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the first dedicated key that facilitates navigation in web pages as taught by Grant in the system of the combination of Hirose, Holehan, Gerpheide, and Godfrey in order to allow quickly and conveniently access to the web pages.

Regarding claims 19 and 33, the combination of Hirose, Holehan, Gerpheide, Godfrey, and Grant teaches at least a second dedicated key that is programmable to actuate a computer program (col. 5, lines 26-67 of Grant).

7. Claims 20 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirose (Patent No. US 5,170,348), Holehan (Patent No. US 5,988,902), Gerpheide (Patent No.: US 6,473,069) in view of Godfrey et al. (Patent No.: US 5,433,610) and further in view of Ure (U.S. Patent No. 6,107,997).

Regarding claims 20 and 34, the combination of Hirose, Holehan, Gerpheide, and Godfrey differs from claims 20 and 34 in that it does not specifically teach a mode switch that enables the touchpad keyboard to switch between functioning as a touchpad keyboard and as a cursor control device. However, referring to Fig. 9, Ure teaches a mode switch that enables the touchpad keyboard to switch between functioning as a touchpad keyboard and as a cursor control device (col. 2, lines 8-19, col. 7, lines 49-55). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the mode switch that enables the touchpad keyboard to switch between functioning as a touchpad keyboard and as a cursor control device as taught by Ure in the system of the combination of Hirose, Holehan, Gerpheide, and Godfrey in order to allow input text and control the cursor quickly and easily.

8. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hirose (Patent No. US 5,170,348), Holehan (Patent No. US 5,988,902), in view of Grant et al. (U.S. Patent No. 6,618,039) and further in view of Kono (Patent No. US 5,914,707).

Regarding claim 37, the combination of Hirose, Holehan, and Grant teaches all the limitation except a microphone for recording audio data for transmission via the network, and for live transmission of audio data for transmission via the network. Kono teaches a microphone (7) for recording audio data for transmission via the network, and for live transmission of audio data for transmission via the network (col. 6, lines 19-40 of Kono). Therefore, it would have been

obvious to one of ordinary skill in the art at the time the invention was made to incorporate the transmission of audio data via the network as taught by Kono in the system of the combination of Hirose, Holehan, and Grant in order to provide a convenient communication in the touchpad system.

Response to Arguments

9. Applicants' arguments filed 4/22/05, have been fully considered but they are not persuasive because as follows:

In response to Applicants' argument filed "the function of the pre-recorded voice in Godfrey is not to provide feedback that a button has in fact been touched as in the present invention, but only play a pre-recorded message that teaches the user about the object in the picture that has been touched". Examiner respectfully disagrees because the Godfrey's system basically gives the user the audio feedback by a pre-recorded sound when the button been touch (Fig. 1, col. 1, line 47 to col. 2, line 43). Applicants' argument filed "Kono does not teach a scrolling zone where a user slides an object up and down to cause scrolling". This claim limitation is not show in the drawing of the present application. However, Kono teaches scrolling buttons (3A and 3B) where the user slides an object up and down to cause scrolling (col. 5, line 61 to col. 6, line 18), as the same function as the claims invention. Applicants' argument filed "None of the references cited teaches anything about a computer network. Teaches a microphone in Kono cannot be used to also assert that the audio data is being recorded for transmission via a computer network, or for live transmission via a computer network, when no computer network is even suggested by any of the references." However, Kono teaches speaker (7) output an audible data via the selection of the key on the touch keyboard (3) (col. 6, lines 19-65), the

transmission inherently via a electronic network of the computer such as the notebook. Holehan also teaches a touchpad (110) having a single sensing surface (120) including circuitry for detecting and localizing a pointing object on the single surface thereof and an overlay disposed on the single sensing surface (col. 4, lines 1-8, lines 33-36). Therefore, it is believed that the rejection is maintained.

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer T. Nguyen whose telephone number is 571-272-7696. The examiner can normally be reached on Mon-Fri: 9:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick N. Edouard can be reached on 571-272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jennifer Nguyen
7/7/05

REGINA LIANG
PRIMARY EXAMINER